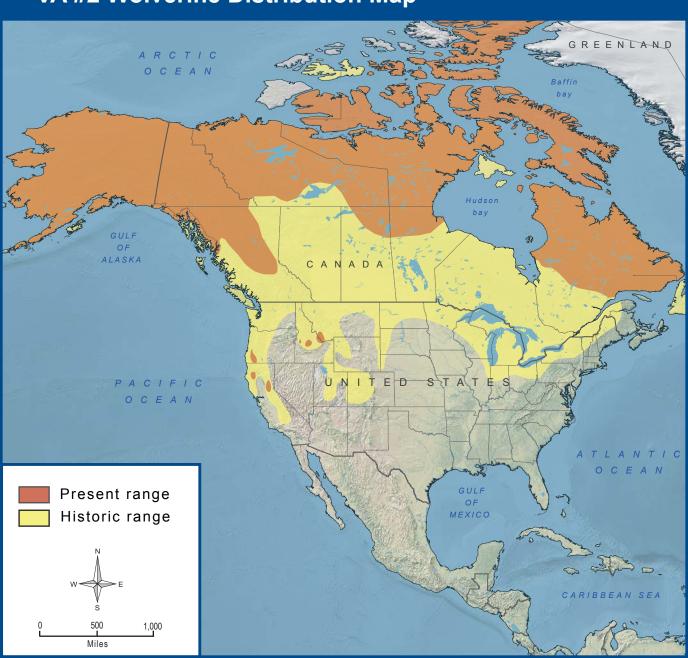
#### **VA #1 Wolverine in Its Habitat**



#### **VA #2 Wolverine Distribution Map**



### **VA #3 Organisms and Their Functions Description of Function 1.** An organism that gets its energy and materials by breaking down the remains of dead organisms

and absorbing the nutrients.

(sugars or starches).

\_\_\_ 4. A one-celled producer with no nucleus.

— 7. An organism that eats dead organisms.

— 8. An organism whose primary food source is

by eating other organisms.

other animals.

\_\_\_ 5. An organism that eats both plants and animals.

— 6. An organism that obtains energy and materials

a. bacteria b. carnivore

**Organism** 

f. omnivore

g. producer

h. scavenger

**2.** An organism whose primary food source is plants. 3. An organism, such as a plant or alga, that uses light energy or chemical energy to produce food

c. consumer d. decomposer e. herbivore

#### **VA #4 Roles in an Ecosystem Natural Region: High Desert North Coastal**

Role in the Ecosystem		Examples of Populations of Organisms		
Producers				
	Herbivores			
nsumers	Carnivores			
	Omnivores			

**Forests** (Redwoods) Oak

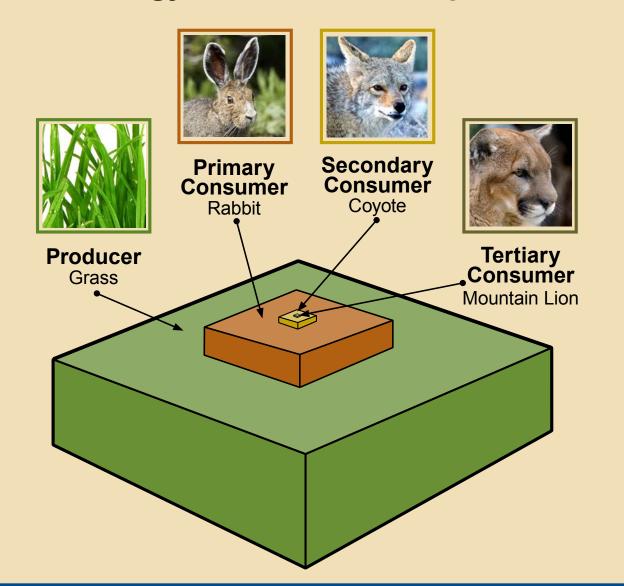
Woodlands

**Scavengers** 

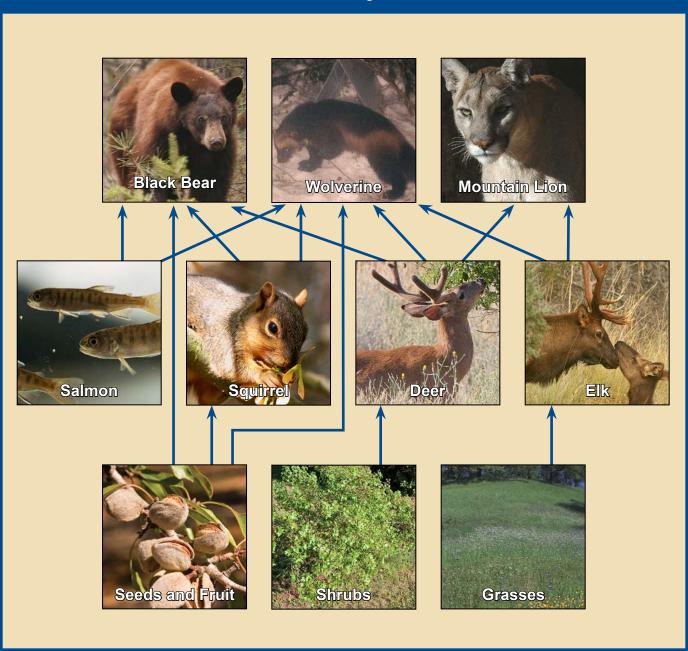
**Decomposers** 

#### VA #5 Sierra Nevada Energy Pyramid

#### 90% Energy Loss at Each Trophic Level



#### **VA #6 Partial Wolverine Ecosystem Food Web**



## VA #7 Part 1: Timber Harvesting 1 Byproduct or change to Is this a Effects on the natural system

byproduct (B) or

В

It returns nutrients to the soil, allowing

hot and thus do not cause as much soil

erosion and harm plants and animals.

a change (C)?

natural system caused by

Logging debris (unused

human practice

stems and limbs)		new plants to grow. It can also provide shelter and nesting sites.
Eroded soil that goes into streams (if harvesting and road building takes place near a stream)	B	Sediment changes water quality in  streams. This can harm fish and other  aquatic life.
Old trees are removed	C	It can remove habitat from animals that  live or eat food from old trees. It reduces  fuel in forests so that wildfires are not too

# VA #8 Part 1: Timber Harvesting 2 Byproduct or change to Is this a Effects on the natural system

natural system caused by human practice	byproduct (B) or a change (C)?	
More light reaches	C	Plants that need light will grow well.
forest floor		Plants that need shade will not grow well.
		The mix of herbivores will change
		depending on which plants grow there.
		Animals that need plants for protection
		will move away until more plants grow.
Compacted soil as harvesting	C	The roots of many plants cannot grow
equipment moves around		well in compacted soil.
Roads are built	C	Roads can divide habitat, preventing
		wildlife breeding. It can make it harder
		for certain species to have enough
		range to hunt. Some animals get killed
		crossing roads.

### **VA #9 Part 2: Timber Harvesting**

What is your recommendation regarding your scenario? Why?
Example: I recommend the timber harvesting be allowed. This will
reduce fire risks to the area, protecting many species. It will also supply
employment to people. Harvesting should only be allowed if it stays away
from water resources, because species in streams can be harmed by
sediment that comes from harvesting and road building. Foresters should
also avoid compacting the soil as much as possible.